p1029: Box multiplication of linear binomials (v14)

Example

Use the box method to multiply $(6x + 3)$ and $(2x + 4)$.

*	6x	3
2x	$12x^2$	6x
4	24x	12

$12x^2 + 6x + 24x + 12$

Combine like terms.

$12x^2 + 30x + 12$

ANSWER: $12x^2 + 30x + 12$

Question 1

Use the box method to multiply $(2x + 9)$ and $(4x + 5)$.

*	2x	9
4x	$8x^2$	36x
5	10x	45

ANSWER: $8x^2 + 46x + 45$

Question 2

Use the box method to multiply $(4x - 7)$ and $(-8x - 5)$.

*	4x	−7
− 8x	− 32x^2	56x
− 5	− 20x	35

ANSWER: $-32x^2 + 36x + 35$

Question 3

Use the box method to multiply $(-4x + 5)$ and $(-6x - 9)$.

*	− 4x	5
− 6x	24x^2	− 30x
− 9	36x	− 45

ANSWER: $24x^2 + 6x - 45$